

WHAT IS CLAIMED IS:

1. A method for producing a continuous filter rod, comprising:

transporting at least one type of finite, essentially completely separated fibers with transport air to a conveyor;

forming a fiber nonwoven on one surface of the conveyor to result in the fibers at least partially contacting one another;

depositing the fiber nonwoven onto a wrapping material web; and

wrapping the fiber nonwoven with the wrapping material web.

2. The method of claim 1, wherein the wrapping step includes compacting the fiber nonwoven.

3. The method of claim 1, wherein during the wrapping step or following the wrapping step, the method further comprises applying energy to the fiber nonwoven to create a bond at points of contacts between the fibers.

4. The method of the claim 1, wherein the continuous filter rod is subsequently cut into at least one of filters and filter elements, and wherein the fibers have a length shorter than the filters and the filter elements.

5. The method of claim 4, wherein the at least one type of fibers contains fibers with an average diameter between about 10 μ m and about 40 μ m.

6. The method of claim 4, wherein the at least one type of fibers contains fibers with an average diameter between about 20 μ m and about 38 μ m.

7. The method of claim 1, further comprising adding additives to the fibers.

8. The method of the claim 1, further comprising compacting the fiber nonwoven prior to the depositing step.

9. The method of claim 7, wherein the conveyor conveys the fiber nonwoven in a movement direction, and wherein the compacting step includes compacting the fiber nonwoven in at least two directions that are perpendicular to the movement direction.

10. The method of claim 1, wherein the depositing step includes mechanically removing the fiber nonwoven from the conveyor.

11. The method of claim 10, wherein the removing step includes utilizing compressed air.

12. The method of claim 1, further comprising shaping the fiber nonwoven prior to the depositing step.

13. The method of claim 12, wherein the conveyor conveys the fiber nonwoven in a movement direction, and wherein in the forming step includes forming at least a semicircle crosswise to the movement direction.

14. The method of claim 13, wherein the forming step includes forming a full circle.

15. The method of claim 1, wherein the depositing step occurs at least in part before the forming step.

16. A filter element cut from the continuous filter rod produced according to the method of claim 1.

17. A machine for producing a continuous filter rod, comprising:

a conveyor;

a fiber compiling device that transports separated fiber materials with transport air to the conveyor to form a fiber nonwoven;

a format device downstream of the compiling device for wrapping a material web around the fiber nonwoven; and

a transferring device for transferring the fiber nonwoven from the conveyor to the format device.

18. The machine of claim 17, further comprising at least one compacting device at the conveyor.

19. The machine of claim 18, wherein at least a section of the conveyor forms at least a part of the compacting device.

20. The machine of claim 17, wherein the conveyor comprises at least one suction belt.

21. The machine of claim 20, wherein the conveyor comprises at least three suction belts.

22. The machine of claim 20, further comprising means for removing the fiber nonwoven from the suction belt with compressed air.

23. The machine of claim 17, wherein the transferring device comprises a transport belt.

24. The machine of claim 23, wherein the transport belt has a concave design.

25. The machine of claim 23, wherein the transferring device comprises two transport belts.

26. The machine of claim 17, wherein the transferring device comprises a nozzle through which the fiber nonwoven is transported.

27. The machine of claim 26, wherein the nozzle shapes the fiber nonwoven into at least one of a round and oval form.